# HAPPENINGS at the SAB

...ensuring a solid technical basis for environmental protection

Volume E5 Number 8 August 2000

## Remembering Alvin L. Alm

**EDITORIAL** 



The Board is saddened by the untimely death of Alvin Alm.

n July 24, 2000, Mr. Alvin L. Alm died in Washington, DC at the Georgetown University Hospital of apparent heart failure. He

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served the Science Advisory Board from 1987 to 1996. In 1988, he was appointed chair to the Science Advisory Board's Research Strategies Advisory Committee (RSAC) by Administrator William K. Reilly. As a member of the Board, Mr. Alm's contributions were many, especially his involvement in the 1990 SAB report Reducing Risk: Setting Priorities and Strategies for Environmental Protection.

Prior to his service on the Board, Mr. Alm had a long and distinguished government career beginning in 1963 at the Bureau of the Budget, where he became a senior budget examiner. In 1973, he joined the EPA as Assistant Administrator for planning and management. At EPA in the mid-1970s, he received the Arthur S. Fleming Award to honor outstanding young professionals in the federal service, and he later received an Energy Department Distinguished Service Medal. He left EPA in 1977, then returned in 1983 for two years as Deputy Administrator under William D. Ruckelshaus. Between EPA jobs, he was assistant secretary of policy and evaluation at the Energy Department and lectured at the John F. Kennedy School of Government at Harvard University, where he directed the energy security program.

He then worked in the private sector as chairman and chief executive officer of Thermal Analytical Corp., chief executive officer of Alliance Technologies Corp., and senior vice president and board member of Science Applications International Corp. In his last government post, as the Energy Department's assistant secretary for environmental management from 1996 to 1998, he helped engineer a

controversial 10-year cleanup of many of the nation's nuclear waste dumps--a task that had been estimated to take up to 70 years. At the time of his death he worked with Chambers Associates promoting a plan to create a nongovernmental association supervised by Chambers to address the environmental goals he worked on at the Energy Department.

Dr. John R. Fowle III Deputy Staff Director, SAB

## TENTATIVE SAB MEETING CALENDAR FOR AUGUST AND SEPTEMBER

Several of the Federal Advisory Committee Act (FACA) meetings noted below have been announced in the Federal Register (FR), together with additional background information. Readers can automatically receive e-mailed copies of FR Notices by subscribing to the SAB Listserver; see Section Updates below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)".

#### **AUGUST**



1 Committee: Radiation Advisory Committee (RAC)

Location: Ariel Rios North, Room 6013
Meeting: Various Issues, Teleconference

Chair: Dr. Janet Johnson, Shepherd Miller, Inc.

DFO: Ms. Melanie Medina-Metzger Email: medina-metzger.melanie@epa.gov

8-9 Committee: Drinking Water Committee (DWC)

Location: Cincinnati, OH [EPA Laboratory]

Meeting: Candidate Containment List (CCL) Research Strategy

Chair: Dr. Richard Bull, MoBull Consulting Inc.

DFO: Mr. Thomas Miller Email: miller.tom@epa.gov

14 -15 Committee: Environmental Engineering Committee (EEC) Subcommittee

Location: Ariel Rios Building, Room 6530

Meeting: Natural Attenuation

Chair: Dr. Domenico Grasso, Smith College

DFO: Ms. Kathleen Conway

Email: conway.kathleen@epa.gov

30 Committee: Environmental Health Committee (EHC)

Location: International Trade Commission Building, Washington, DC

Meeting: Integrated Risk Information System (IRIS)

Chair: Dr. Mark Utell, University of Rochester Medical Center

DFO: Mr. Samuel Rondberg
Email: SamuelR717@aol.com

#### SEPTEMBER

20 Committee: Environmental Engineering Committee (EEC)

Location: TBD

Meeting: Diffusion Workshop Results and RROS

Chair: Dr. Hilary I nyang, University of Massachusetts

DFO: Ms. Kathleen Conway

Email: conway.kathleen@epa.gov

**20-22** Committee: Ecological Processes and Effects Committee (EPEC)

Location: TBD

Meeting: Ecological Report Card

Chair: Dr. Terry Young, Environmental Defense Fund

DFO: Ms. Stephanie Sanzone
Email: sanzone.stephanie@epa.gov

To View a Tentative 6 Month Calendar Click Here
OR

GO TO THE SAB WEBSITE <a href="www.epa.gov/sab/mtgcal.htm">www.epa.gov/sab/mtgcal.htm</a>



#### **GLOSSARY OF ACRONYMS**

CASAC Clean Air Scientific Advisory Committee COUNCIL (Council on Clean Air Compliance Analysis **AQMS** Air Quality Modeling Subcommittee **HEES** Health and Ecological Effects Subcommittee DC Washington, DC DFO Designated Federal Officer (SAB Staff lead) DWC **Drinking Water Committee** FC **Executive Committee FFAC Environmental Economics Advisory Committee** EEC **Environmental Engineering Committee** FHC **Environmental Health Committee EPEC Ecological Processes and Effects Committee** Integrated Human Exposure Committee IHEC Integrated Risk Project IRP Radiation Advisory Committee RAC Research Strategies Advisory Committee **RSAC RTP** Research Triangle Park, NC Scientific Advisory Panel (FIFRA) (Not SAP SAB affiliated) To Be Announced TBA TBD To Be Determined Tele Publicly accessible telephone conference call

## COMMITTEE ACTIVITIES IN JULY

On July 5, the Clean Air Scientific Advisory Committee (CASAC) met via public teleconference to



review and approve the report of its <u>Technical Subcommittee on Fine Particle Monitoring</u> on its review of the Agency's *PM*<sub>2.5</sub> *Monitoring Network*. The Subcommittee report came out of discussions with Agency staff at the Subcommittee's April 18-

19 public meeting in Research Triangle Park, NC. A copy of the abstract of the report is located in this issue of Happenings and the final report is posted on the SAB website (www.epa.gov/sab).

On July 10-11, the Integrated Human Exposure Committee (IHEC) met in Research Triangle Park, NC to review EPA's draft strategic plan for the analysis of data from the National Human Exposure Assessment Survey (NHEXAS). The Agency sought advice from the Committee on the following issues: (a) Does the Strategy encompass all the significant needed analysis projects? If not, which should be added or deleted?; (b) Even if all the projects are optimal, are they strategically presented and prioritized? Would alternative strategic criteria be useful?; (c) Is the Strategy likely to be useful to ORD management for resource allocation?; and (d) Does the Strategy provide adequate guidance to scientists for developing the most useful analysis tasks?

The Committee found that EPA had done a good job in drafting the Strategy, and that it was responsive to the points raised by the Committee in its previous review (EPA-SAB-IHEC-ADV-99-004, February 1999). The Committee's report will provide some suggestions for further improvement of the document.

On July 12-13, the Executive Committee (EC) met in Research Triangle Park, NC to receive updates from its committees and subcommittees regarding their recent and planned activities. The EC reviewed draft report "Scientific and Technological Achievement Awards" from its Scientific and Technological Achievement Awards Subcommittee. Also, included in their deliberations was a discussion with Agency officials on the scope and breadth of R&D activities performed at RTP; they received briefings on the Integrated Risk Information System (IRIS) project; they discussed possible activities the Board might undertake to improve the use of science at the science policy interface; they hosted the third in a series of workshops on the role of science in stakeholder processes.

On July 13, the SAB Executive Committee (EC) conducted its third Workshop on the Role of Science in Stakeholder Processes as a part of the SAB EC Meeting

from 2:30-5:30 pm. Dr. Granger Morgan chaired the session. Mr. Thomas Beierly (Resources for the Future) reported on preliminary results and preliminary conclusions from research funded by the National Science Foundation on 225 cases involving stakeholder involvement. He presented an overview of data and conclusions related to science and stakeholder involvement, which will be one component of his report. Based on preliminary data analyzed, he reported that the case study record was generally reassuring. Of the cases he is studying, most cases led to high quality decisions. There are also "checks and balances" in place--stakeholder processes do not lead directly to implementation. Finally, cases involving stakeholder processes appear to have more transparency, and equal or less susceptibility to political influence when compared to traditional environmental decision-making, because "decision-making as usual" is a fairly low hurdle to measure against.

The Board then heard detailed presentations on two cases of stakeholder involvement. Dr. John Toll from Parametrix presented the experience of stakeholder processes in environmental decision-making in the Duwamish Estuary in Washington State. He had prepared the briefing in collaboration with Ms. Sydney Munger, Senior Water Quality Manger for the King County Department of Natural Resources. Dr. Henry Topper (US EPA, Office of Pollution Prevention and Toxics) addressed the topic "Science in the Community: Lessons from the Work of the Baltimore Air Committee," a project conducted as part of EPA's collaboration with the Baltimore Community Environmental Partnership.

The Executive Committee then discussed plans for the final Workshop on the Role of Science in Stakeholder Processes, planned for the next quarterly meeting of the Executive Committee. The SAB Executive Committee is planning to send a letter of advice to the Administrator on the topic of science and stakeholder processes after the final workshop is completed.

### SAB REPORTS IN PROGRESS



a PROJECTS DUE FOR LATER EC MEETINGS

#### **EEC**

- 1) Review of Natural Attenuation
- 2) Commentary on the Measures of Environmental Technology Performance
- 3) Commentary on the Use of Social
  Sciences to Reduce Barriers to
  Pollution Prevention

#### **EPEC**

4) Review of Eco-Risk Report Card

#### **IHEC**

5) Review of NHEXAS

#### IRP/EEC

6) I RP Risk Reduction Report

#### <u>RAC</u>

- 7) Advisory on GENII Version 2.0
- 8) Advisory on TENORM
- b PROJECTS THAT DO NOT REQUIRE EC APPROVAL
  There are no reports at this time.
- PROJECTS THAT HAVE RECEIVED EC APPROVAL

  AND AWAIT COMPLETION

  EEC
  - 1) Commentary on Waste Re-Use
  - 2) Environmental Technology Verification

#### EC Subcommittee

- 2) Review of the Use of Human Data
- 3) Review of Children's Cancer
- 4) Review of the Air Toxics Monitoring Strategy

5) Review of the Scientific and Technological Achievement **Awards** 

## **ABSTRACTS OF NEW REPORTS**





Clean Air Scientific Advisory Committee (CASAC)

Advisory on the PM 2.5 Monitoring Network EPA-SAB-CASAC-ADV-00-006

The Clean Air Scientific Advisory Committee (CASAC) provided advice and recommendations to EPA on the deployment and future plans for the PM<sub>2</sub>, monitoring network, the approach to be used for the analysis of carbon species in samples collected in the chemical speciation monitoring network; and the sampling strategy for coarse particles should a coarse particle NAAQS be developed in the 2002 standard setting process. The Committee expressed its strong support for a change in the basic approach to monitoring particles in both the coarse or fine size fractions in that the emphasis should be on development of continuous monitoring methods over integrated filter methods. It is clear that there have been substantial technological developments in continuous mass monitoring approaches, and the Agency needs to move as rapidly as practical toward implementation of continuous monitoring methods of particulate matter as is now used for most of the other criteria pollutants.

An SAB Report on EPA's White Paper Valuing the Benefits of Fatal Cancer Risk Reduction EPA-SAB-EEAC-00-013

Environmental Economics Advisory The Committee (EEAC) of the EPA Science Advisory Board (SAB) reviewed the Agency's white paper Valuing Fatal

25, 2000 in response to a request received from EPA. The EEAC's general conclusion is that estimates of the value of statistical life (VSL) derived from wage-risk tradeoff studies should not be taken as precise estimates of the value of reducing the risk of fatal cancers, because of differences in the nature of the risks being valued and in the socio-economic characteristics of the affected populations, and because of various sources of uncertainty. In the Committee's judgment, there is not at present a sufficient theoretical and empirical basis for making most of the quantitative adjustments to the wage-risk-based VSL suggested by the Agency to account for these differences. Despite limitations of the VSL estimates, these seem to offer the best available basis at present for considering the value of fatal cancer risk reduction. We therefore recommend that the Agency continue to use a wage-risk-based VSL as its primary estimate, including appropriate sensitivity analyses to reflect the uncertainty of these estimates.

Review of the US EPA Response to Section 6102(e) of the Transportation Equity Act for the 21st Century EPA-SAB-CASAC-LTR-00-006

The Clean Air Scientific Advisory Committee (CASAC) reviewed EPA's response to Section 6102(e) of the Transportation Equity Act for the 21st Century, which requires the U.S. EPA to verify the performance of the sampler that was designated by 40 CFR Part 50, Appendix L (July 1997) to be the Federal Reference Method (FRM) sampler for PM<sub>2.5</sub>. The Committee responded to the following questions: a) Has the proper methodology been used to address the requirement in the Transportation Equity Act? b) Was the methodology applied correctly? c) Is the Report's interpretation correct? and d) Has the submitted Report responded to the Congressional mandate/request as stated in the Act? In summary, the Committee concludes that, in general, the Report meets the requirements set by the Act however, it could be further strengthened by additions and changes suggested in the Committee's report. In addition, the Report should not represent a termination of testing and evaluation of Cancer Risk Reductions during a meeting on February monitoring methods for airborne particulate matter. A long

term study of the performance of the FRM is needed to assess the quality of the data coming from the mass monitoring network.



Commentary on Residual Risk Program

EPA-SAB-EC-COM-00-005

Following its evaluation of two recent Science Advisory Board (SAB) reviews on residual risk, the SAB's Executive Committee (EC) advised EPA of potentially significant issues arising from with the Agency's efforts to implement the residual risk requirements of the Clean Air Act Amendments (CAAA) of 1990. Although the Board endorsed the Agency's plan, it raised concerns when an actual interim application of the plan was reviewed. The Board noted that, in their view, it is not clear that scientific analysis will be able to generate the type of information envisioned in the CAAA. While decisions can be made in the absence of such scientific information, they will not be sufficiently precise for the intended purpose. The Board also noted that while their concerns may turn out to be ill-founded, they recommend that the Agency and Congress seriously re-consider the current Clear Air Act Amendments mandates and their implementation strategy that depends on scientific analyses that will be resource-demanding, at a minimum, and, quite possibly impossible to carry out in a credible manner. The Board closes by endorsing the concept of science-based decision making at the Agency, while also recognizing that no one is well served by asking science to take on an impossible task.



Notification of a Consultation on I SCORS Sewage at

Sludge Dose Modeling Scenarios EPA-SAB-RAC-CON-00-008

There are no abstracts for consultations.

### COMPUTER NEWS



(1) SAB Website within the EPA Home Page. You are invited to visit the SAB Website at URL:

http://www.epa.gov/sab

The site offers such features as

- (a) Full-text reports for FY1994-FY2000
- (b) Background information about the structure, function, and membership of the SAB
- (c) A rolling two-month calendar of SAB meetings
- (d) The most current issue of HAPPENINGS
- (e) Draft/final agendas of upcoming meetings and draft/final minutes of past meetings.
- (f) And much, much...well, maybe a little bit more!
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## THE BOARD BIO



n this month's bio we'd like to introduce you to Dr. Steven M. Bartell. Dr. Bartell is a Principal of The Cadmus Group, Inc., and he manages their Oak Ridge, TN office. He is also an adjunct faculty member in

the Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville. Prior to joining the Cadmus Group, Steve was Vice President and Director of SENES Oak Ridge, Inc., and before that he was a senior staff scientist in the Environmental Sciences Division, Oak Ridge National Laboratory from 1980 to 1992.

Dr. Bartell received his bachelor's degree in biology from Lawrence University in Wisconsin. He then received an M.S. in botany (plant ecology) and a Ph.D. in limnology and oceanography, both from the University of Wisconsin, Madison.

Dr. Bartell's primary research and technical interests include ecosystem science, ecological modeling, and ecological risk assessment. He has conducted ecological risk assessments for a variety of physical, chemical, and biological stressors in aquatic and terrestrial ecosystems for both public and private sector clients. Steve is a two-term member of the USEPA Science Advisory Board's Ecological Processes and Effects Committee (EPEC). He also participates as a member of the SAB's Executive Committee Environmental Models Subcommittee on the use of ecological models to support environmental regulations.

Dr. Bartell currently serves on the editorial boards of Risk Analysis, Human and Ecological Risk Assessment, and Chemosphere. He has authored more than 100 technical publications concerning ecology, environmental sciences, and risk assessment, including the books <u>Ecological Risk Estimation</u> (Lewis Publishers,

1992) and the <u>Risk Assessment and Management Handbook</u> (McGraw-Hill, 1996).

Steve prefers to spend any free time with a golf club in his hand. (As a participant in the Golf & Environment Summit program, he did assist in drafting the Environmental Principles for Golf Courses in the United States.) In reality, he spends his free time helping his wife Cindy with their 20-acre horse farm nestled in the foothills of the Cumberland Mountains. Cindy raises American Saddlebred show horses and Steve provides "ground control". It makes for a stable relationship.

**BON MOT** 



When Hydrogen Tech played Oxygen U, the game had just begun.

When Hydrogen racked up two fast points, and Oxygen still had none.

Then Oxygen scored a single goal, and thus it did remain, At Hydrogen two and Oxygen one, game called because of...RAIN!